

Benicia Arsenal Powder Magazine No. 2  
(Building No. 10)  
Benicia Industrial Park  
Benicia  
Solano County  
California

HABS No. CA-1948

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PHOTOGRAPHS

HISTORICAL AND DESCRIPTIVE DATA

## HISTORIC AMERICAN BUILDINGS SURVEY

POWDER MAGAZINE NO. 2  
(Building No. 10)

HABS No. CA-1948

Location: Benicia Industrial Park, Benicia, Solano County, California.

USGS Benicia Quadrangle, Universal Transverse Mercator Coordinates: 10.576210.4211780.

Present Owner: City of Benicia, 250 East "L" Street, Benicia, California 94510.

Present Occupant/Use: Vacant.

Significance: This powder magazine, constructed in 1857, is almost an exact copy of the first stone magazine at the arsenal, which had been constructed the year before, and which also survives. Both are low, massive groin-vaulted structures of local sandstone ashlar. Above the door of this magazine is a sculptural group, supposedly executed by a French stonemason, John Gomo, representing an eagle perched on a cannon barrel.

PART I. HISTORICAL INFORMATION

## A. Physical History

1. Date of erection: 1857. This building, the second permanent masonry magazine constructed at the arsenal, was called Magazine No. 2 throughout the nineteenth century. The report of the Secretary of War for 1857 stated that the first magazine (an earlier building, still standing, now Building No. 2) had been completed and that the excavations for the second magazine had been started. This building was completed in late 1857 or early 1858. In the report of the Secretary of War for 1858, the commanding officer of the arsenal wrote: "One stone fire-proof magazine, No. 2, 105 7/12 by 36 1/2 feet, erected, covered by stone groined arches and slate roof, and capable of containing 3,000 barrels of powder." The building carries the inscription "Erected A.D. 1857."
2. Architect: None known.
3. Original plans and construction: See HABS No. CA-1948-9. This unlabeled, undated drawing probably served for both Magazines No. 1 and 2 (Buildings Nos. 2 and 10). The two magazines are almost identical but differ in details. The second magazine has a

slightly different and more satisfactory vaulting pattern and boasts a decorative carving of the capitals and the sculptural group above the doorway.

In the correspondence of the arsenal commander, F. D. Callender, preserved in the National Archives, is a reference to the magazines at the arsenal that he wrote were "like those at Watervliet, built, I believe, after the same drawing." A sheet of measured drawings executed in 1964 of an 1828 Watervliet Arsenal powder magazine, Building No. 119, confirms that the Benicia powder magazines were probably erected using the plans prepared for Watervliet. The Benicia buildings are different from those at Watervliet, however, in their use of stone rather than brick for the vaulting.

4. Stonemason: Local tradition credits a French mason named John Gomo with the cutting of the stone and the carving of the sculptural group. This apparently derives from Solano County Historical Society, Benicia's Early Glory (n.p., 1958), p. 71: "The Government sent East for skilled stonecutters, and among them was John Gomo, French artisan, descended from a long line of skilled quarry workers in the Old World." It has proved impossible to locate the source of this information, but in the 1860 census, John Gomo is listed as a 33-year-old stonecutter, originally from France.
5. Alterations and additions: Because of its extremely solid construction, the building has remained in excellent condition down to the present. It is possible that the wood lining of the building dates to a later period. The concrete steps to the front entrance are of a recent date.

Prepared by: Robert Brueggmann  
Project Historian  
Historic American Buildings Survey  
Summer, 1976

## PART II. ARCHITECTURAL INFORMATION

### A. General Statement:

1. Architectural character: The powder magazine is a low, massive building, with groin vaulting used to minimize the use of combustible materials. The intricate vaulting blocks are an excellent example of the stonecutter's art. Finished with great

care, the exterior walls consist of well-joined marginally drafted stone blocks. Sculptural decorations include the unusual column capitals and the fine sculptural group above the door.

2. Condition of fabric: Good.

B. Description of Exterior:

1. Over-all dimensions: The one-story building measures approximately 35'-7" x 104'-6".
2. Foundation: Sandstone.
3. Walls: Rusticated sandstone ashlar, 4' thick. There is a projecting course at the cornice at the sill. The quoins at the corners and around the door project slightly. At the sill are vents that offset in the wall forming a chase cavity, covered by copper plates with a series of small holes drilled in. A smaller type of vent is in the upper wall and offsets to vents on the inside. There are two upper vents and four sill vents in each long facade, with three sill vents on each end. On the east end are two large stone bumpers that appear not to be an original part of the building.
4. Structural system, framing: Load-bearing stone walls. Roof probably wood framed. Stone groin-vaulted ceiling supported by stone columns and stone walls.
5. Stoops: Near the center of the north side is a concrete stoop with five concrete steps, a wood bumper on the porch and wood handrail at the steps.
6. Openings:
  - a. Doorways and doors: A large doorway is in the center of the north side. On the exterior is a large wooden door covered with copper panels, large iron strap hinges and a large iron hasp. At the inner wall is a pair of wooden doors, metal covered to the exterior. The wood interior face is diagonal wood siding banded and forming two panels, a smaller lower one and a larger upper one. One leaf has a top and bottom iron dead bolt. There is a wood threshold and stone sill. On the exterior lintel above the door, there is a cannon with large eagle sitting on it carved from one piece of stone. On the quoin-like stone surround at the top on the left side are inscribed "ERECTED" and on the right side "A.D. 1857."

- b. Windows and shutters: There are two square window-like openings on each end of the building, metal-covered closures on the exterior with large iron strap hinges and stone surround. The inner closure is diagonal wood, banded and metal-covered on the exterior face.

7. Roof:

- a. Shape, covering: The hipped roof is covered with slate shingles applied with copper nails. There are three lightning rods on the ridge, one of which is missing.
- b. Cornice, eaves: There is a wide overhang, boxed in and covered with copper. A small section of the copper is missing on the soffit. The fascia is copper covered. There is a small section of galvanized iron gutter over the door with a lead downspout.

C. Description of Interior:

- 1. Floor plans: The interior is one large open space. Down the center of the space are six octagonal stone columns, with six stone pilasters on each long wall.
- 2. Flooring: Wood boards.
- 3. Wall and ceiling finish: The walls are horizontal wood siding, varying in width in each bay, between stone pilasters. The ceiling is smooth sandstone blocks, groin-vaulted beginning with a cross at the apex. Mortar joints are painted white.
- 4. Decorative features: On each stone column at opposite sides of the entrance are carved shell designs on four corners just below the stone capital. The two columns to the west of this have acanthus leaves carved on them and the two to the east have brackets.

D. Site:

- The building faces north, nestled between hills with a paved road leading in from the west. A wood frame and wire fence kennel has been constructed to the north of the building. Natural vegetation

surrounds the building. Approximately 150 yards to the east at the top of the hill is Interstate Highway 680. The building is in the industrial park.

Prepared by: John P. White  
Project Supervisor  
Historic American Buildings Survey  
June 1976

### PART III. SOURCES OF INFORMATION

#### A. Architectural drawings:

Unlabeled drawing. Blue and orange ink with blue and yellow watercolor. Shows partial side elevation and transverse section. Probably for both Powder Magazine Nos. 1 and 2, (Buildings Nos. 2 and 10). National Archives, Cartographic Division, Record Group 156, Folder 4. (HABS No. CA-1948-10).

#### B. Early Views:

Undated U.S. Army photograph, detail of doorway  
(HABS No. CA-1948-8).

U.S. Army photograph, 1944, interior (HABS No. CA-1948-9).

Photograph of the magazine from the south, showing the cistern in the foreground, reproduced in Josephine Cowell, History of Benicia Arsenal (Berkeley, ca. 1963), p. 69.

#### C. Bibliography:

Report of the Secretary of War, U.S. Congress, House Documents 35th Congress, 2nd Sess., 1858, Serial Vol. 999, p. 1334.

F. D. Callender to Col. H. K. Craig, ordnance officer in Washington, Nov. 16, 1857, Correspondence of the Commander of the Benicia Arsenal, National Archives, Record Group 156.

#### D. Supplemental Information:

From "Report on the Capacity for Storing and Distributing Ordnance Stores and Facilities for Manufacture and Repairs at Benicia Arsenal," Report of the Secretary of War, U.S. Congress, House Documents, 56th Congress, 1st Sess., 1899, Serial Vol. 3911, p. 548.

There are three magazines, Nos. 1, 2, and 3: two are built of stone and one is built of brick. No. 1 is of stone, 103 1/2 feet long by 35 feet wide. It is very well built, perfectly dry; its ceiling is stone laid in groined arches; it has provision for safe ventilation. It is capable of containing 1,500 barrels of powder without unduly filling it, and it is probably that in case of necessity it might be made to hold 2,000 barrels, No. 2 is similar in all respects to No. 1, and the same remarks apply to it. No. 3 is a brick magazine 80 feet long by 31 feet wide and its capacity is 1,000 barrels without close packing; with it about 1,400 barrels. [This magazine was built in 1866. It has been demolished.]

#### PART IV. PROJECT INFORMATION

This project was undertaken by the Historic American Buildings Survey in cooperation with Exxon Company, U.S.A. (a division of Exxon Corporation) and the Benicia Historical Society. Under the direction of John Poppeliers, Chief of H.A.B.S., the project was completed during the summer of 1976 at the Historic American Buildings Survey Field Office, Benicia, California, by John P. White (Assistant Professor, Texas Tech University), Project Supervisor; Robert Bruegmann (University of Pennsylvania), Project Historian; Kenneth Payson (Cornell University), Architect; and student assistant architects Scott Barnard (University of Pennsylvania); James L. Cook (Texas Tech University); and Gary A. Statkus (University of Illinois, Urbana-Champaign). The written data were edited by Alison K. Hoagland in the HABS Washington office in January, 1981.